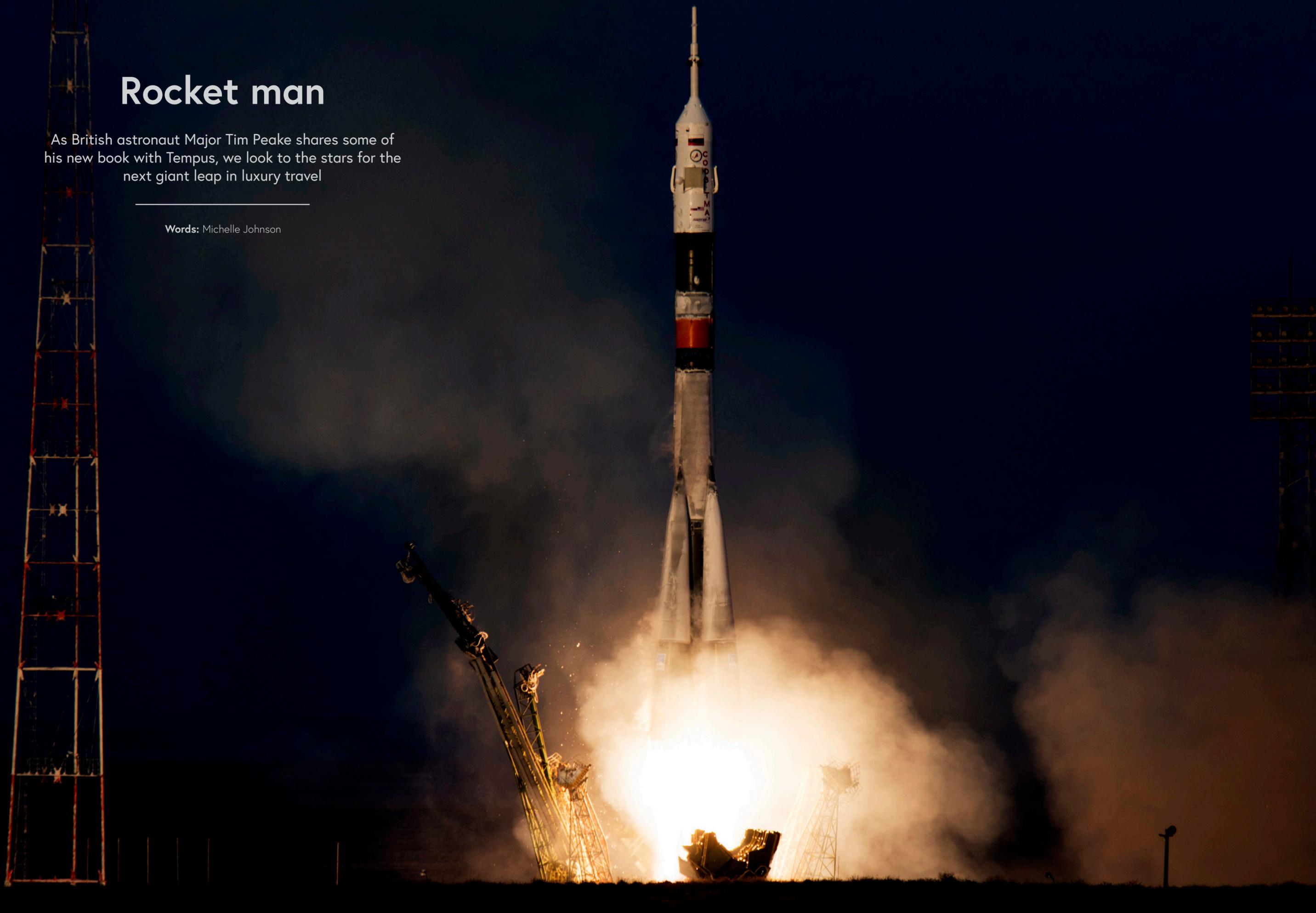


Rocket man

As British astronaut Major Tim Peake shares some of his new book with Tempus, we look to the stars for the next giant leap in luxury travel

Words: Michelle Johnson



As Britain's first government-funded astronaut, Major Tim Peake CBE had high hopes of inspiring a new generation to scientific interest. But he couldn't possibly have guessed the incredible impact his six months aboard the International Space Station would have on Britain's interest in STEM (science, technology, engineering and mathematics) subjects and space travel. As well as igniting excitement in schools – where more than a million children were involved in his numerous engagement projects and experiments – his trip sparked interest from those in the luxury sector, where space tourism has stepped away from sci-fi to become the next big thing thanks to entrepreneurs including Sir Richard Branson, founder of Virgin Galactic, and Elon Musk, CEO of SpaceX.

As the space race heats up between billionaires Branson and Musk, Major Peake is sharing his experiences of space travel in a new book 'Ask an Astronaut: My Guide to Life in Space', in which he answers some of the most popular questions he has encountered since returning from his 186-day Principia mission last year.

Major Peake, 45, served in the British Army for 18 years, flying dangerous missions in Afghanistan after gaining his wings as an Apache Helicopter pilot. He later became a test pilot, before beating 9,000 applicants to become the European Space Agency's first British astronaut.

In December 2015, he was launched to the ISS aboard the Soyuz TMA-19M, commanded by Russian cosmonaut Yuri Malenchenko and NASA astronaut Timothy Kopra. While aboard the station, the astronaut shared his scientific experiments and challenges with Earth, taking part in the London Marathon via treadmill and performing anti-gravity research that, as he told Jeremy Paxman, he hopes might find a cure to ailments like osteoporosis.

It's no wonder that interest from British travellers has surged – but, as Peake attests in his new book, space travel is still a perilous undertaking. From spacewalks to replace faulty units on the station's solar arrays to navigation malfunctions while docking at the ISS, Peake and his team had many hurdles to overcome. And then there's the time needed to 'readapt' to life on earth – hypersensitivity, motion and equilibrium problems, for instance – which can take anywhere between six weeks and three years to overcome. Mentally, astronauts have to prepare for the isolation of space, which as Peake says, is simultaneously claustrophobic and limitless.

"This is going to sound truly remarkable but I most miss the rain," he said during his mission. "Perhaps that's because I haven't had a shower for six months. The feeling of nice cold drizzle on my face right now actually sounds blissful."

Now readjusted from his 78 million mile journey – or 3,000 orbits of the Earth – and ready for his next adventure, Major Peake gives Tempus a sneak peek of what it's like to leave the Earth behind.

“UNENCUMBERED BY THE EFFECTS OF GRAVITY, I FELT COMPLETELY DETACHED. IT WAS THE MOST ASTONISHING AND HUMBLING EXPERIENCE OF MY LIFE”

What does it feel like to launch from a 300-tonne rocket?

As I climbed aboard our tiny capsule, situated within the nose-fairing of the rocket, the vehicle felt completely alive beneath me. Cryogenic fuel was continuously boiling off, covering the base of the rocket in an eerie white fog.

In the minutes until launch, there was time for one final tradition to be observed, to get the adrenaline flowing. Each cosmonaut is allowed three songs to be piped into the capsule before lift-off. I had elected for Don't Stop Me Now by Queen, Beautiful Day by U2 and A Sky Full of Stars by Coldplay. Through our headsets, and drowning out the loud burr of the rocket, we heard the familiar notes of The Final Countdown by Europe, chosen by our Soyuz commander – who says Russians don't have a sense of humour?

What was your most amazing experience on the ISS?

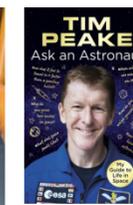
My first ever extravehicular activity [spacewalk] was the most vivid memory I have of life in space. It may only have lasted four hours and 43 minutes, but it was a day for which I had been preparing for years, and one I will never forget.

We set out to repair a faulty solar panel – a routine task back on Earth. Temperatures are so extreme they can fluctuate from 200°C to -200°C between sunlight and shade... at any moment you could be hit by a hurtling micrometeorite [or] lose your grip and find yourself floating in space.

What was the best part of your spacewalk?

The feeling of awe and reverence. I had the ability and freedom to turn in any direction, one minute marvelling at how fragile and beautiful Earth looked as it slipped gracefully into shadow, the next minute intimidated by the vast blackness of space. Unencumbered by the effects of gravity, I felt completely detached. It was the most astonishing and humbling experience of my life.

timpeake.esa.int



Ask an Astronaut: My Guide to Life in Space by Major Tim Peake is published in hardback by Century, priced £20

Photo credits

Images courtesy of © ESA/NASA

THE BILLIONAIRE SPACE RACE

If you dream of going where no tourist has gone before, then look no further. These three game changers are getting ready to launch into the new world of space tourism.

VIRGIN GALACTIC

When Sir Richard Branson first announced his intention of offering luxury space travel to the masses 13 years ago, it seemed like a dream that would never be realised. Now, despite some explosive setbacks during test flights, Branson is confident that their first manned reusable space plane (the 3,000mph SpaceShipTwo) could launch by the end of 2018. Tickets are available at \$250,000 a pop, with physicist Stephen Hawking one of the first in line. "My love for space is about how much it can do for people back here on earth, and that's what Virgin Galactic is pushing towards," Branson said.

virinalgalactic.com

SPACEX

Elon Musk's company began life delivering satellites and supplies to the ISS and NASA. It aims to create reusable rockets that will reduce the cost of space flight – and open it up to commercial use. SpaceX made history in March this year, when it safely reused a rocket twice. Musk aims to fly two tourist expeditions to the moon next year, but ultimately, he's set his sights on Mars by 2022. Could the red planet be the next five-star resort? Musk certainly thinks so. He said: "I want to die on Mars... just not on impact."

spacex.com

BLUE ORIGIN

Created by Amazon founder Jeff Bezos in 2000, Blue Origin is running along the same tracks as SpaceX to provide suborbital flights for space-loving tourists. Although they haven't yet ventured quite as far as the rival company, they were the first to safely launch and land a commercial rocket built for six people from a suborbital flight – around 60 miles from Earth.

blueorigin.com